

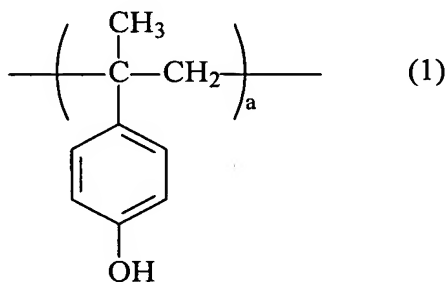
AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

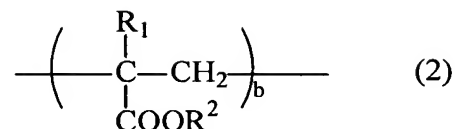
LISTING OF CLAIMS:

1.-23. (Canceled)

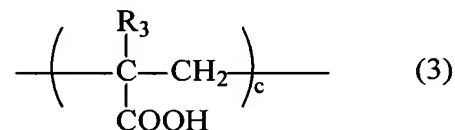
24. (Currently Amended) A positive ultraviolet sensitive resist ~~whose part, a~~ portion of which when subsequently irradiated with ultraviolet rays is soluble or dispersible in an organic solvent or an aqueous developing solution, and whose unirradiated ~~[[part]]~~ portion is substantially insoluble and undispersible in an organic solvent or an aqueous developing solution, said resist obtained by heating a composition comprising a base polymer, an ether-bond-containing olefinic unsaturated compound and an acid-generating agent, where the base polymer is a copolymer comprising the structural units represented by formula (1):



formula (2):



where R¹ is hydrogen or methyl and R² is C₁-C₆ straight or branched unsubstituted alkyl or C₁-C₆ straight or branched substituted alkyl, and formula (3):



where R³ is hydrogen or methyl,

wherein a, b and c are 0.05 to 0.7, 0.15 to 0.8 and 0.01 to 0.5, respectively and a+b+c=1.

25. (Previously Presented) The positive ultraviolet sensitive resist claimed in claim 24, where a compounding ratio of the copolymer comprising the structural units represented by formulas (1) to (3) and the ether-bond-containing olefinic unsaturated compound is 0.5 to 50/99.5 to 50 wt% as a ratio of copolymer/unsaturated compound based on their total wt% values, and the amount of the acid-generating agent is 0.1 to 40 wt parts to 100 wt parts of the total amount of the copolymer and the olefinic unsaturated compound.

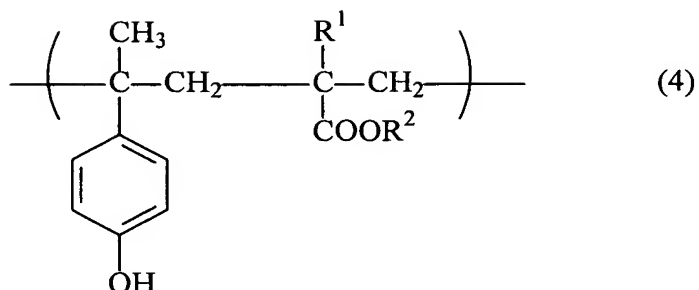
26. (Previously Presented) The positive ultraviolet sensitive resist claimed in claim 24, where R^2 in the structural unit represented by formula (2) is C_1 - C_6 straight or branched unsubstituted alkyl or C_1 - C_6 straight or branched hydroxylated alkyl.

27. (Previously Presented) The positive ultraviolet sensitive resist claimed in claim 26, where R^2 in the structural unit represented by formula (2) is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl and 2-hydroxyethyl.

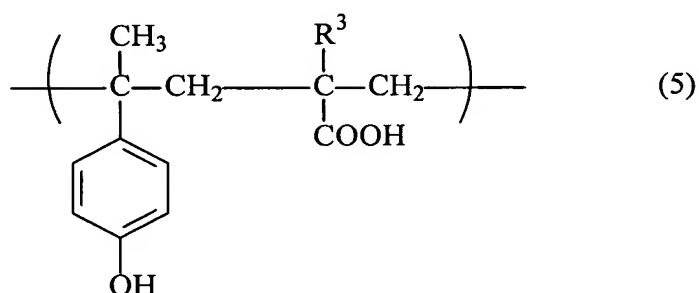
28. (Previously Presented) The positive ultraviolet sensitive resist claimed in claim 24 where a material giving the structural unit represented by formula (2) is a (meth)acrylate selected from the group consisting of methyl acrylate, ethyl acrylate, n-propyl acrylate, isopropyl acrylate, n-butyl acrylate, isobutyl acrylate, sec-butyl acrylate, 2-hydroxyethyl acrylate, methyl methacrylate, ethyl methacrylate, n-propyl methacrylate, isopropyl methacrylate, n-butyl methacrylate, isobutyl methacrylate, sec-butyl methacrylate and 2-hydroxyethyl methacrylate.

29. (Previously Presented) The positive ultraviolet sensitive resist claimed in claim 24 where for the copolymer, a in formula (1) is 0.20 to 0.45, b in formula (2) is 0.25 to 0.70, and c in formula (3) is 0.15 to 0.40, and $a+b+c=1$.

30. (Previously Presented) The positive ultraviolet sensitive resist claimed in claim 24 where the copolymer comprising the structural units represented formulas (1), (2) and (3) is an alternating copolymer comprising the structural units represented by formula (4):

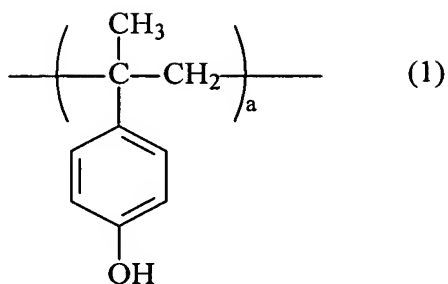


where R¹ is hydrogen or methyl and R² is C₁-C₆ straight or branched unsubstituted alkyl or C₁-C₆ straight or branched substituted alkyl, and formula (5):

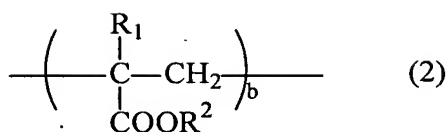


where R³ is hydrogen or methyl, in which the total content of these structural units is at least 60 mol%.

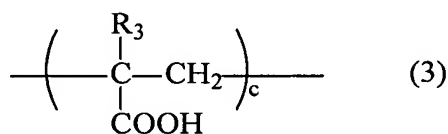
31. (Currently Amended) A positive thermally sensitive resist ~~whose part, a~~ portion of which when subsequently irradiated with heat rays is soluble or dispersible in an organic solvent or an aqueous developing solution, and whose unirradiated ~~[[part]] portion~~ is substantially insoluble and undispersible in an organic solvent or an aqueous developing solution, said resist obtained by heating a composition comprising a base polymer, an ether-bond-containing olefinic unsaturated compound and an acid-generating agent, where the base polymer is a copolymer comprising the structural units represented by formula (1):



formula (2):



where R^1 is hydrogen or methyl and R^2 is $\text{C}_1\text{-C}_6$ straight or branched unsubstituted alkyl or $\text{C}_1\text{-C}_6$ straight or branched substituted alkyl, and formula (3):



where R^3 is hydrogen or methyl,

wherein a, b and c are 0.05 to 0.7, 0.15 to 0.8 and 0.01 to 0.5, respectively

and $a+b+c=1$.

32. (Previously Presented) The positive thermally sensitive resist claimed in claim 31 where a compounding ratio of the copolymer comprising the structural units

represented by formulas (1) to (3) and the ether-bond-containing olefinic unsaturated compound is 0.5 to 50/99.5 to 50 wt% as a ratio of copolymer/unsaturated compound based on their total wt% values, and the amount of the acid-generating agent is 0.1 to 40 wt parts to 100 wt parts of the total amount of the copolymer and the olefinic unsaturated compound.

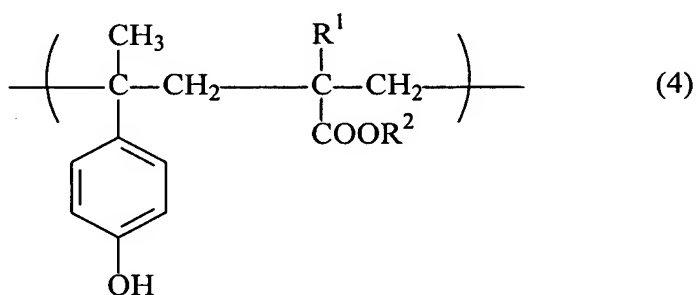
33. (Previously Presented) The positive thermally sensitive resist claimed in claim 31 where R^2 in the structural unit represented by formula (2) is C_1 - C_6 straight or branched unsubstituted alkyl or C_1 - C_6 straight or branched hydroxylated alkyl.

34. (Previously Presented) The positive thermally sensitive resist claimed in claim 33 where R^2 in the structural unit represented by formula (2) is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl and 2-hydroxyethyl.

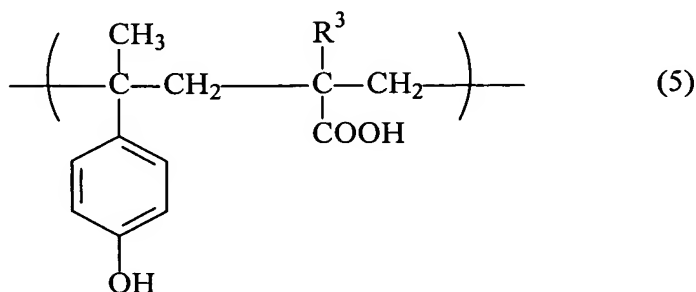
35. (Previously Presented) The positive thermally sensitive resist claimed in claim 31 where a material giving the structural unit represented by formula (2) is a (meth)acrylate selected from the group consisting of methyl acrylate, ethyl acrylate, n-propyl acrylate, isopropyl acrylate, n-butyl acrylate, isobutyl acrylate, sec-butyl acrylate, 2-hydroxyethyl acrylate, methyl methacrylate, ethyl methacrylate, n-propyl methacrylate, isopropyl methacrylate, n-butyl methacrylate, isobutyl methacrylate, sec-butyl methacrylate and 2-hydroxyethyl methacrylate.

36. (Previously Presented) The positive thermally sensitive resist claimed in claim 31 where for the copolymer, a in formula (1) is 0.20 to 0.45, b in formula (2) is 0.25 to 0.70, and c in formula (3) is 0.15 to 0.40, and $a+b+c=1$.

37. (Previously Presented) The positive thermally sensitive resist claimed in claim 31 where the copolymer comprising the structural units represented formulas (1), (2) and (3) is an alternating copolymer comprising the structural units represented by formula (4):

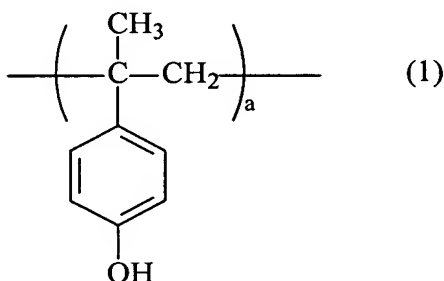


where R^1 is hydrogen or methyl and R^2 is $\text{C}_1\text{-C}_6$ straight or branched unsubstituted alkyl or $\text{C}_1\text{-C}_6$ straight or branched substituted alkyl, and formula (5):

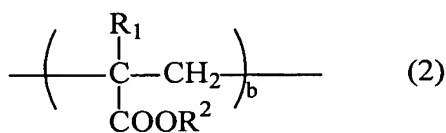


where R³ is hydrogen or methyl, in which the total content of these structural units is at least 60 mol%.

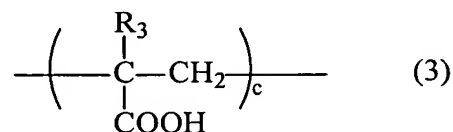
38. (Currently Amended) A positive visible-light sensitive resist ~~whose part, a~~ portion of which when subsequently irradiated with visible light is soluble or dispersible in an organic solvent or an aqueous developing solution, and whose unirradiated ~~[[part]]~~ portion is substantially insoluble and undispersible in an organic solvent or an aqueous developing solution, said resist obtained by heating a composition comprising a photosensitizer and a composition comprising a base polymer, an ether-bond-containing olefinic unsaturated compound and an acid-generating agent, where the base polymer is a copolymer comprising the structural units represented by formula (1):



formula (2):



where R¹ is hydrogen or methyl and R² is C₁-C₆ straight or branched unsubstituted alkyl or C₁-C₆ straight or branched substituted alkyl, and formula (3):



where R³ is hydrogen or methyl,
wherein a, b and c are 0.05 to 0.7, 0.15 to 0.8 and 0.01 to 0.5, respectively
and a+b+c=1.

39. (Previously Presented) The positive visible-light sensitive resist as claimed in claim 38 where a compounding ratio of the copolymer comprising the structural units represented by formulas (1) to (3) and the ether-bond-containing olefinic unsaturated compound is 0.5 to 50/99.5 to 50 wt% as a ratio of copolymer/unsaturated compound based on their total wt% values; the amount of the acid-generating agent is 0.1 to 40 wt parts to 100 wt parts of the total amount of the copolymer and the olefinic unsaturated compound; and the amount of the photosensitizer is 0.1 to 20 wt parts to 100 wt parts of the total amount of the copolymer, the olefinic unsaturated compound and the acid-generating agent.

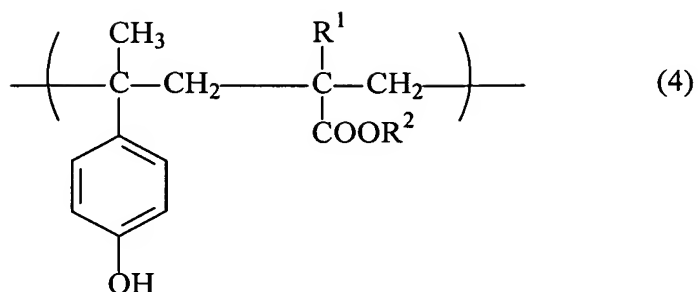
40. (Previously Presented) The positive visible-light sensitive resist as claimed in claim 38 where R² in the structural unit represented by formula (2) is C₁-C₆ straight or branched unsubstituted alkyl or C₁-C₆ straight or branched hydroxylated alkyl.

41. (Previously Presented) The positive visible-light sensitive resist as claimed in claim 40 where R^2 in the structural unit represented by formula (2) is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl and 2-hydroxyethyl.

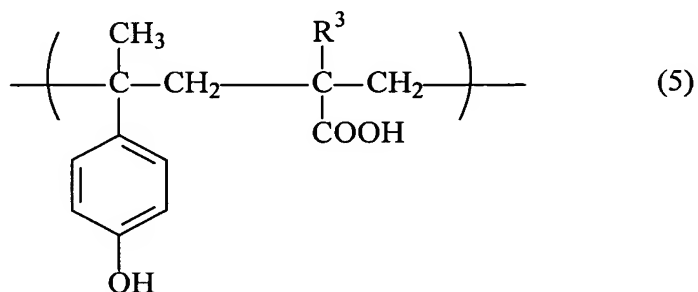
42. (Previously Presented) The positive visible-light sensitive resist as claimed in claim 38 where a material giving the structural unit represented by formula (2) is a (meth)acrylate selected from the group consisting of methyl acrylate, ethyl acrylate, n-propyl acrylate, isopropyl acrylate, n-butyl acrylate, isobutyl acrylate, sec-butyl acrylate, 2-hydroxyethyl acrylate, methyl methacrylate, ethyl methacrylate, n-propyl methacrylate, isopropyl methacrylate, n-butyl methacrylate, isobutyl methacrylate, sec-butyl methacrylate and 2-hydroxyethyl methacrylate.

43. (Previously Presented) The positive visible-light sensitive resist as claimed in claim 38 where for the copolymer, a in formula (1) is 0.20 to 0.45, b in formula (2) is 0.25 to 0.70, and c in formula (3) is 0.15 to 0.40, and $a+b+c=1$.

44. (Previously Presented) The positive visible-light sensitive resist claimed in claim 38 where the copolymer comprising the structural units represented by formulas (1), (2) and (3) is an alternating copolymer comprising the structural units represented by formula (4):



where R¹ is hydrogen or methyl and R² is C₁-C₆ straight or branched unsubstituted alkyl or C₁-C₆ straight or branched substituted alkyl, and formula (5):



where R³ is hydrogen or methyl, in which the total content of these structural units is at least 60 mol%.